

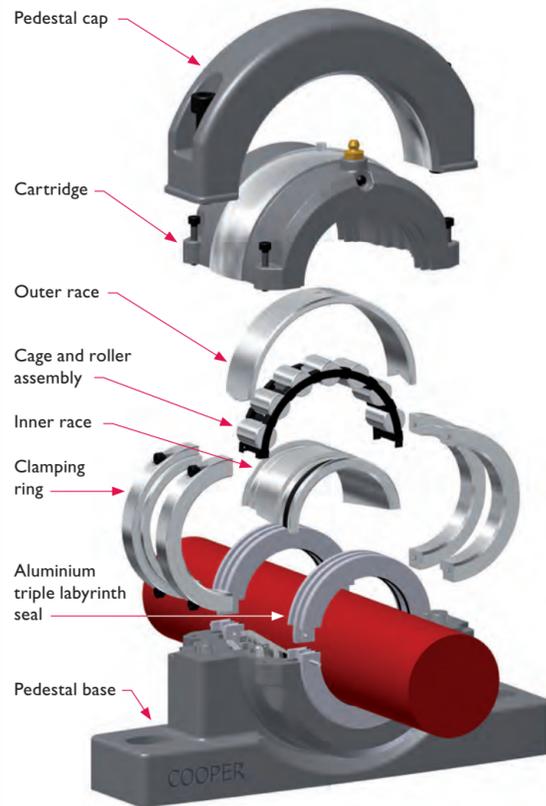
COOPER ROLLER BEARINGS: A WORLD OF EXPERIENCE IN MINING

Cooper's contribution to making mining operations run more smoothly has been benefiting customers around the world for many decades. Backed by a considerable R&D spend, its product range has continued to develop in tandem with advances in all forms of extraction and processing.

The company's long-standing commitment to the split roller bearing as a liberating element in the design of new machinery, and as a perfect drop-in solution where solid bearing replacement would be unduly time- and labour-intensive, continues to win customers. Today, this is reflected in a strong international organisation, with a Cooper presence across six continents and authorised supply chain partners in over thirty countries.

Easy-to-fit, easy to disassemble: the logic that underpins the cost benefits

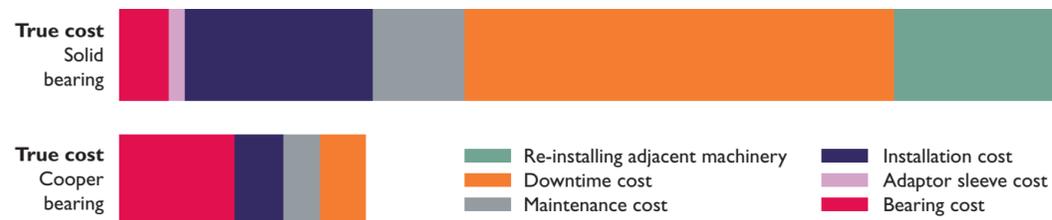
Cooper roller bearings are completely split to the shaft, yet designed and engineered to be extremely fast and easy to assemble into robust, reliable units that give exceptional service under the harshest conditions.



What you can expect to save for each Cooper bearing installed

The diagram shows the areas in which Cooper bearings can save you money. A simple calculation will often show through-life savings of hundreds of thousands of pounds per bearing.

Please note that these considerations leave out the fast and easy inspection made possible by Cooper split roller bearings, which helps eliminate sudden failure and all its associated costs.



A wide range of mounting options

Available in a range of materials such as iron, nodular iron or steel, the variety of Cooper mountings reflects the wide variety of tasks which split roller bearings can perform. There is a full range of SN-, SAF- and SD-compatible pedestals.



The perfect sealing solution for your application

Cooper offers a complete range of seals to ensure long bearing life by meeting the exact needs of a given location and working environment. Here are just four of our seals typically used in mining.

Aluminium triple labyrinth (ATL)



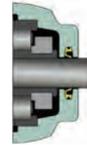
Machined aluminium-bodied triple labyrinth seal for high speed and general applications. Supplied as standard in USA and Canada.

Felt (F)



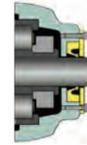
Standard in UK and Europe for most Cooper bearings in general industrial applications.

Synthetic rubber single lip (SRS)



Suitable for wet but not submerged conditions. Can be used for improved lubricant retention by mounting lip innermost.

Single lip with spring-loaded retaining plate (SRS RP)



Suitable for severe splash or completely submerged conditions. The standard version is suitable for up to 2m of fluid, the high pressure version for up to 30m.

COOPER BEARINGS GROUP Customer Service Centres

UK, Europe, South America, Asia, Australia and the Middle East
Cooper Roller Bearings Company Ltd.
Wisbech Road
Kings Lynn, Norfolk, PE30 5JX
United Kingdom
Tel: +44 (0) 1553 763447
Fax: +44 (0) 1553 761113
Email: CoopersalesUK@kaydon.com

USA, Canada, Mexico and Central America
The Cooper Split Roller Bearing Corp.
5365 Robin Hood Road, Suite B
Norfolk, VA 23513
USA.
Tel: +1 (1) 757 460 0925
Fax: +1 (1) 757 464 3067
Email: CoopersalesUS@kaydon.com

Germany
Cooper Geteilte Rollenlager GmbH.
Postfach 100 423
Oberbenrader Str. 407
47704 Krefeld Germany
Tel: +49 (0) 2151 713 016
Fax: +49 (0) 2151 713 010
Email: CoopersalesDE@kaydon.com

People's Republic of China
Cooper Bearings Group Beijing,
Room 909, Canway Building Tower I
No 66, Nanlishi Road, Xicheng District
Beijing
PRC 100045
Tel: +86 (0) 10 68080803
+86 (0) 10 68080805
+86 (0) 10 68080806
Fax: +86 (0) 10 68080801
Email: CoopersalesCN@kaydon.com

Brazil
Cooper do Brasil Ltda.
Caixa Postal 66.105
CEP 05.314-970, Brasil
Tel: +55 (0) 11 3022 3706
Tel: +55 (0) 11 9156 2500
Email: CoopersalesBR@kaydon.com

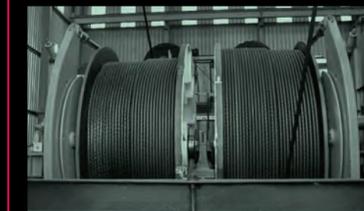
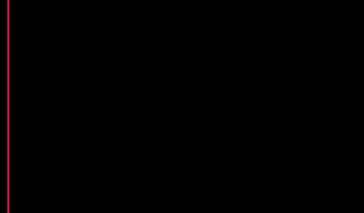
India
Cooper Roller Bearings Company Ltd.
Wisbech Road
Kings Lynn, Norfolk, PE30 5JX
United Kingdom
Tel: +91 (0) 9820180089
Email: CoopersalesIN@kaydon.com

Australia
Cooper Bearings Group
PO BOX 241, Kelmscott
Western Australia 6991
Tel: +61 (0) 8 93979990
Fax: +61 (0) 8 93979990
Email: CoopersalesAU@kaydon.com



www.cooperbearings.com

Document code: CPR016_aEng_Mar11

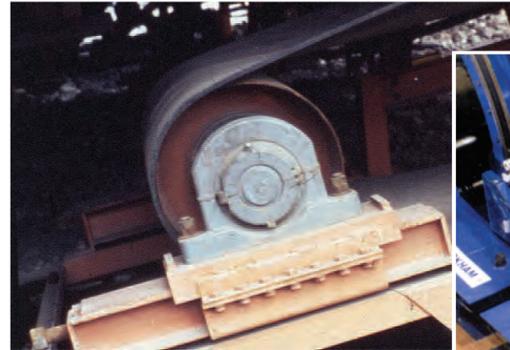


Underground or surface, Cooper bearings make mining more profitable

Cooper bearings are deployed in the important mining applications shown here, as well as in motors, generators and gearboxes across the industry.

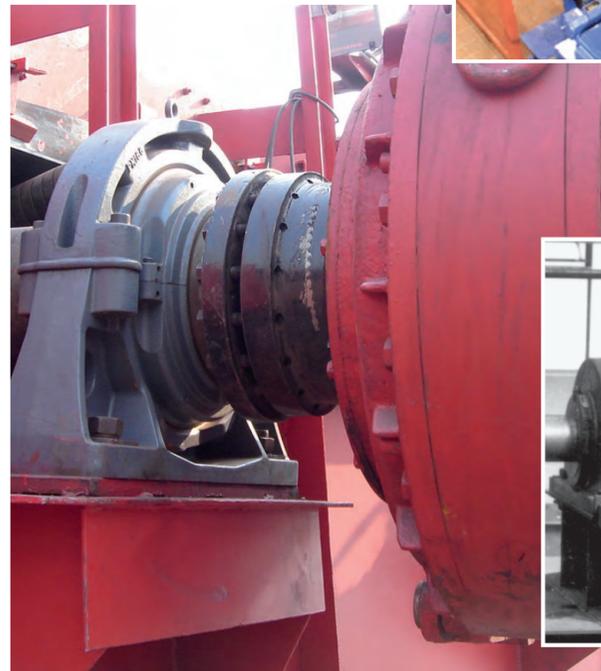
Materials handling

In mines throughout the world, Cooper bearings are helping to keep raw, intermediate and refined products flowing smoothly.



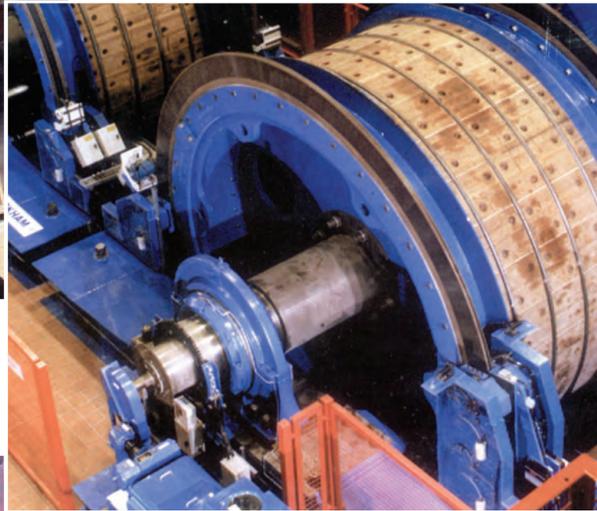
Stockpile and surgepile management

Cooper bearings are extensively used in stacker reclaimers because of their long life and ease of maintenance.



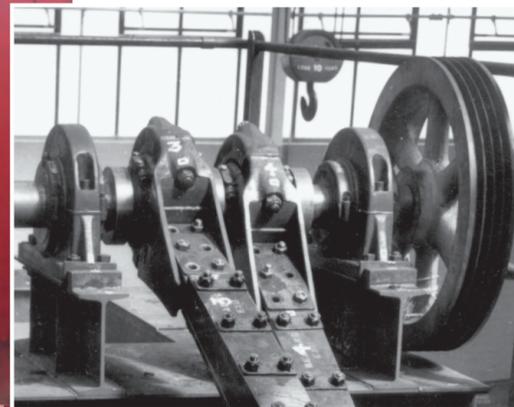
Hauling and winding

Wherever haulage gear and winders play a vital part in moving workers and materials safely and reliably from one level to another, you'll find Cooper bearings at work both on main shafts and in gearboxes.



Screening, sizing, washing

Vibrating screens, trommels and ore washers place heavy demands on the mechanisms that keep them in motion. Cooper bearings play a major role in uncomplicated, relentlessly efficient operation.



Crushing and milling

The reduction of piece size to give more or less uniform particles can exact a high price in wear and tear. Cooper bearings are to be found in ball mills and crushers across the mining industry.



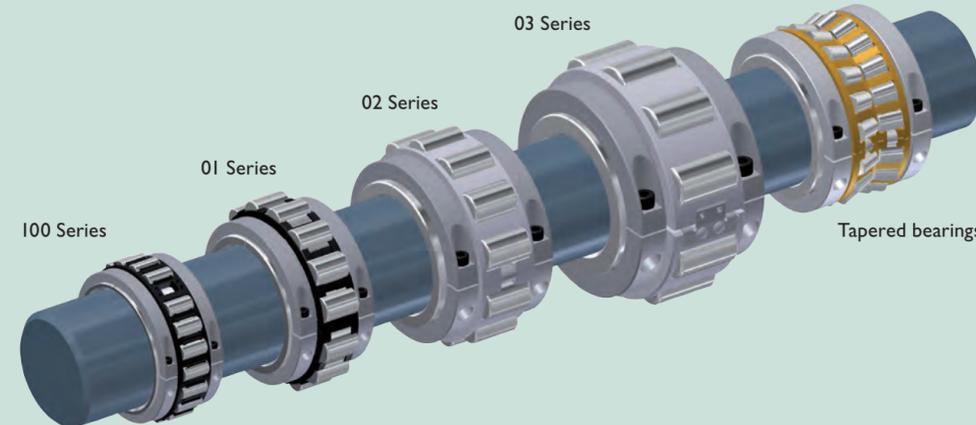
Ventilation and air movement

Fans and ventilators operate over long periods and often at high speeds to prevent gas build up and regulate temperature. Cooper bearings have proven more than equal to the task across many and varied challenging mining scenarios.



Cooper bearings used in mining

Cooper split roller bearings include the 100 Series of high-speed compact bearings, the medium duty 01 Series, heavy duty 02 Series and extra heavy duty 03 Series. In addition there is a rapidly developing range of double-row split tapered bearings. We also offer a heavy duty bearing in an SD-compatible heavy duty pedestal.



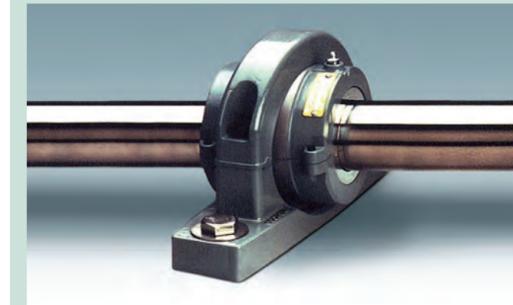
The basis of phenomenal through-life cost savings: Cooper roller bearings are split to the shaft

- Bearing installation is fast and easy no matter how 'trapped' the location
- No shaft realignment is required
- Inspection is simple and fast, aiding planned maintenance and reducing both downtime and "unexpected" failure
- Smaller range of operations needed, leading to task and toolbox simplification
- Handling weights are reduced (smaller, lighter pieces). Lifting gear is not required for most Cooper sizes. No lifting of nearby equipment is required
- No cooling system is needed, thanks to low friction

- A better long-term solution: the Cooper inner race protects the shaft and eliminates journal wear



The secret of long bearing life: a seal that stays aligned with the shaft, even when the shaft is misaligned



- Full seal integrity even if the shaft moves $\pm 2.5^\circ$
- Reduction of foreign materials ingress, even in very dusty environments
- No running-in period needed
- Little lubricant leakage, making lubrication simpler and keeping work surfaces cleaner

